

**REMARKS**

**(A) STATUS OF THE APPLICATION**

**DISPOSITION OF CLAIMS**

- (i) Claims 11, 12, 16, and 19-21 are pending in the application.
- (ii) Claims 1-10, 13-15, and 17-18 were previously canceled.
- (iii) Claims 11, 12, 16, and 19-21 have been rejected under 35 U.S.C. § 112, 2<sup>nd</sup> ¶.
- (iv) Claims 11, 12, 16, and 19-21 have been rejected under 35 U.S.C. § 103(a).

**(B) RESPONSE TO REJECTION OVER UNDER 35 U.S.C. § 112, 2<sup>ND</sup> ¶**

According to the Examiner, Claims 11, 12, 16, and 19-21 are indefinite under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph, because in Claims 11 and 12 the term “(cyclo)aliphatic polyol,” is not supported in the originally filed Specification on Page 3. The specification is said not to disclose any examples of (cyclo)aliphatic polyols having 3 to 6 hydroxyl groups and that the specification only shows aliphatic polyols having 3 to 6 carbon atoms and not cycloaliphatic diols.

As pointed out in Applicants' previous response, page 3, lines 3-13, clearly support aliphatic polyols having 3-6 hydroxyl groups disclosing 8 different polyols. Lines 5-6 of page 3 disclose hydrogenated bisphenols and 1,4 cyclohexane dimethanol which are (cyclo)aliphatic polyols illustrating a cycloaliphatic structure. A person skilled in the art would definitely know that, for example, a cyclohexane having at least 3 hydroxyl groups can be used to form the polyester polyol used in Applicants' invention. To support a term in the claims, Applicants can not be expected to list each and every compound in existence but only need to exemplify typical compounds that can be used which has been done. Typically useful cyclic structures have been clearly shown.

Applicants respectfully request that the Examiner withdraw the indefiniteness rejection under 35 U.S.C. § 112, 2<sup>nd</sup> Paragraph.

**(C) RESPONSE TO REJECTION UNDER 35 U.S.C. § 103(A)**

The Examiner has maintained the rejection of the rejection of Claims 11, 12, 16, and 19-21 as obvious ”), under 35 U.S.C. 103(a), over U.S. Patent No. 6,063,448 to Duecoffre, *et al.* (*hereinafter* “Duecoffre).

The Examiner has taken the following position “a coating of Duecoffre would have the same properties as in claimed invention, since it is made from a coating composition substantially identical to that of claimed invention” (see last paragraph, page 4 of the final office action). This position is totally incorrect.

Applicants have previously pointed out that Duecoffre’s hybrid polymers are different from a simple physical mixture of a (meth)acrylic copolymer and polyester polyol of Applicants’ invention. Duecoffre’s clear coat contains a hybrid binder comprising polyester polyol as one part, and the (meth)acrylic copolymer as the second part and a polyester which is not the polyester (a) of the composition used in Applicants’ process.

Duecoffre formulates a hybrid polymeric system by forming a (meth)acrylic copolymer by free-radically polymerizing monomers in the presence of hydroxy-functional polyesters. (See Duecoffre, col. 1, lines 63-66, col. 2, lines 57-59, col. 12, Example 3 and claim 1.) Duecoffre clearly requires the (meth)acrylic copolymer to be produced in the presence of one or more of the hydroxyl functional polyesters. In contrast, the binder of the Applicants’ invention is a simple physical mixture of the components. The degree of entanglement of the two different polymer chains is greater in the hybrid polymer system (Duecoffre) and the polymers may be covalently bonded in comparison to the simple physical mixture of two polymers Applicants invention.

There is absolutely no evidence to support the Examiner’s position that the coating compositions formed from Duecoffre’s hybrid polymer composition would be substantially the same as those of Applicants’ invention. Logic would dictate that since the hybrid polymers of Duecoffre are substantially different from the mixture of hydroxyl polyester and hydroxyl (meth)acrylate copolymer used to formulate

Applicants' coating composition, the properties of the coatings would be substantially different. For the Examiner to take the above position some level of evidence needs to be offered to support that position.

Duecoffre does not disclose all elements of Claims 11 and 12 and a *prima facie* case for obviousness has not been made.

In the previous amendment, the double digit superiority of the physical properties of Applicants' composition were pointed out in comparison to compositions that were far more closely related than those of the hybrid polymer compositions of Duecoffre. This comparison clearly showed that for every physical properties test, the compositions of present invention showed double-digit percentage improvements and/or significant, and therefore unexpected improvements, over the comparative coatings. Not only that, for every concentration range that was tested, the coating compositions of the present invention were always and in most instances, significantly better than the comparative coatings.

Applicants state that not only the *prima facie* case for obviousness is not established, but even if it were established, the unexpected results of the present invention rebut such a presumption of obviousness.

In light of the above, Applicants submit that the 35 U.S.C. § 103(a) based rejection of obviousness of pending Claims 11, 12, 16, and 19-21 should be withdrawn.

**CONCLUSION**

In view of the above remarks, Applicants respectfully submit that they properly traversed, accommodated, or rendered moot, the stated grounds of rejection and that they have made a complete response to the Final Office Action dated February 12, 2008.


Therefore, Applicants believe that the application stands in condition for allowance with withdrawal of all grounds of rejection and respectfully solicit a Notice of Allowance.

If the Examiner has questions regarding the application or the contents of this response, Applicant invites the Examiner to contact the undersigned.

Please charge any unaccounted fee that may be due, to Deposit Account No. 04-1928 (E. I. du Pont de Nemours & Co.).

RESPECTFULLY SUBMITTED,

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